



Barriers To Introducing Nutrition Services In Rural Communities

**Michelle Auld
Rural Allied Health Team, Community Health Services
Darling Downs Regional Health Authority, Toowoomba**

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Rural Allied Health Team, Community Health Services
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Improving population nutrition has been identified as one of the most promising public health interventions in Australia because dietary intake can be influenced in favour of better health. The elderly have been identified as nutritionally at risk due to a variety of inter-related factors. This is particularly so in rural areas because of an array of variables including poor access to nutrition support services.

The Rural Rehabilitation Options Project (RROP) provided an innovative framework for improving rural access to nutrition support services. As a pilot project the team encountered many barriers that hinder rural nutrition service delivery. This paper discusses these difficulties as well as some of the initiatives implemented as solutions in this project. The recommendations should alert and assist other health practitioners undertaking similar rural health practices.

The aetiology of nutritional problems is multifactorial¹. Older people may be at nutritional risk due to physiological, social, psychological and socioeconomic reasons². Physiological problems include declining digestive and absorptive capacities¹, decreased taste and smell sensitivity, poor dentition³, reduced total energy needs, physical disabilities, acute and chronic health conditions and polypharmacy⁴. Social psychological issues affecting the elderly include less social support contributing to social isolation and loneliness⁵, poverty, depression, dementia and other mental health conditions⁴. These issues are compounded by lifestyle changes such as loss of a spouse, friends or family⁶.

In rural areas the older population are at greater nutritional risk. This is due to non-existent or inadequate health services and facilities combined with poor social conditions and economic uncertainty⁷. Lack of health services has been followed by a decreased awareness of preventative health services and deficiencies in health status compared to urban centres⁸.

The RROP was a twelve month funded project which aimed to provide allied health services to the rural elderly of the West Moreton Region, Queensland. The multidisciplinary team included physiotherapy, occupational therapy, speech pathology, social work and dietetic services. Staff were able to provide innovative methods of service delivery.

This included services in the home, and involvement in and initiation of self-help and support groups in conjunction with local service providers and community members. The project encouraged working with other sectors including hospitals and community health staff, domiciliary nurses, general practitioners and members of the community.

As a pilot project, the team encountered a variety of barriers which hindered nutrition support service delivery. These included cultural and environmental influences on diet, poor access to nutrition support services, attitudes of local service providers and the challenges of introducing a visiting service.

1. Cultural And Environmental Influences On Diet

Recent studies have examined the effect of cultural and environmental factors on rural communities' nutrition and health. They suggest that rural people experience barriers to choosing healthy food beyond that experienced in metropolitan areas^{9,10}.

Rural grocery stores are comparatively small, with less variety, decreasing the access to healthy foods. Additionally the cost of food was much greater. It is paradoxical that in agricultural areas the cost of fruit and vegetables may be high, even though it is produced locally. This reflects the chaotic food and distribution systems to rural communities. Access to healthy foods was also limited in local food outlets. The poor availability of healthy food alternatives (such as low fat or salt reduced products) is a common feature in rural settings.

For some people living in smaller communities, especially people with disabilities or a lack of transport, all shopping may be restricted to the local general store. In this instance food prices are extremely high and choices limited. The high cost of food is exacerbated by the low socio-economic status of rural elderly due to dependence on pensions, effect of the drought and lower employment levels⁸.

It is recommended that the nutrition worker visit local supermarkets to become acquainted with the cost and variety of items available, so a range of alternative products could be suggested in nutrition education. Conducting supermarket tours was found to be an effective way to form networks with the local retailers and learn more about the local food systems.

Although cultural subgroups existed in the rural areas visited this was not to the extent of those found in the city or urban areas. Thus cultural influences on diet were identified but perhaps not as well catered for in the rural communities. This can be illustrated in one of the town's Meals on Wheels service. One client discontinued his Meals on Wheels due to the unacceptability of the vegetables given. He was not accustomed to these foods in his country of origin.

Urban Meals on Wheels services have made significant advances to cultural appropriateness. One example is the Ethnic Food Kit - which incorporates ethnic foods into the regular Meals on Wheels Menu¹¹. Due to the lower ethnic population perhaps this is not seen as a priority; however, it can limit access to healthy food for some people. The project did not address this issue, but it reinforces the need for consumer participation in measuring the quality and acceptability of services.

The environmental influence on diet is also apparent in the older population. It was observed that many locals consumed high levels of milk and meat. This observation is supported by the 1985 National Dietary Survey of School Children where a significantly higher proportion of rural children reported consumption of meat, meat products and whole milk⁸. It has been established that food intake differs between rural and urban residents. For example, fewer low fat items are chosen by rural compared to urban dwellers⁸.

The RROP project attempted to provide a primary health care focus with an emphasis on health promotion and disease prevention. RROP initiated nutrition education to individuals and groups to address the dietary norms of locals and advised on alternative eating practices.

2. Poor Access To Nutrition Support Services

The three primary rural centres visited had little access to nutrition support services. The closest service was in Ipswich (up to 45 minutes away). Public transport to Ipswich was limited and not sensitive to the needs of people with disabilities. People often relied on friends or relatives to drive them in. Many of those who still drove their own cars commented that they did not feel confident driving to and around their urban centre. People living outside the town centres had even greater difficulties accessing transport.

The Project improved local people's access to nutrition services and information. The services were provided in the local town's hospital, community health centre or more usually the client's own home. The service remained flexible, sometimes utilising respite care centres or medical clinics. Access to information was also enhanced by the many health promotion projects implemented and support groups formed. For example, this included involvement in health expos, arthritis and diabetes support groups and heart health awareness programs.

3. Attitudes Of Local Service Providers

Anxiety amongst local service providers about role demarcation was observed. Initially some of the local service providers were concerned with duplication of services, reduction in the need of hospital services and their own professional roles. This served as a barrier since interprofessional understanding, and individuals' ability to not feel threatened by possible overlap, determines the success of the team¹².

However, these attitudes dissipated over time. The combined service provider case conference allowed open communication between all staff. Some services requested education on the roles of each allied health professional and combined efforts with RROP to provide joint client visits, community education and health promotion. All of these activities improved awareness of roles of each discipline and acceptance of the service into each community. Additionally, the physiotherapist in each town was a local resident, which assisted the profile and promotion of the service.

Hospital staff were also exposed to education about the team and roles of each discipline and RROP also provided training when requested. With the increase of outpatient numbers and health promotion activities, the project was able to outline the country hospital's potential as a preventative health facility. Acceptance of the project may have moved more smoothly if early consultations involving all team members with the different communities and health workers had occurred.

Referrals for RROP were accepted from community health nurses, domiciliary nursing services, hospitals, local allied health professionals, general practitioners, medical superintendents and clients. The general practitioner was contacted for medical input and to discuss the client's case (with their consent). Most of the general practitioners were pleased with the establishment of the service, although some were reluctant to move to a multidisciplinary model of service delivery. Again early consultations and introductions to the whole team could be useful in discussing the referral procedures. This may assist in sharing ownership of the project.

The project did not provide services to children and younger adults. Some referrals did not meet the eligibility criteria, so were directed to Ipswich. It was evident that the project could not meet all the nutritional needs of the community. Some service providers felt that aged care was not a priority for nutrition services.

When a group of people are working together, it is essential that they share a similar outlook before the maximum benefit can be achieved¹³. It is well established that nutrition is an integral component of health, contributing to physical and cognitive function¹⁴. Both of these factors are critically important in quality of life of the elderly and their ability to maintain their independence¹⁵. The elderly consume a large portion of health and welfare resources¹⁶ and as the population is ageing, greater demand is being placed on the health care system¹⁷. The consequences of untreated malnutrition may include a reduction in quality of life, with increases in dysfunction, morbidity and health care costs¹⁸.

Another attitude encountered was the idea that providing services in the home was not worth the expense. A home visit has the advantages of the health worker learning more about the background and living situation of a client, a greater chance of working with the client's partner and/or family in an environment in which the client feels comfortable and relaxed.

In a client's own home, there is an abundance of education tools. Nutrition education can be enhanced by use of the client's food packaging, food items and recipes. Domiciliary nursing services have observed and documented the success of dietitian home visits¹⁹.

National policy identifies home care as a preference to hospital care for the elderly on the basis of health economics and quality of life²⁰. The importance of equity of access to an optimal range of high quality health services must also be acknowledged. In many of the smaller communities no building existed where clients could be seen as an outpatient. For some, home visits are the only way of receiving a service locally.

4. Challenges Of Providing A Visiting Service

Transport

The single most important resource in providing a visiting service, especially one that conducts home visits to rural areas and properties, is transport. Unfortunately RROP was under-resourced for cars. Two cars were at the disposal of a staff of eight, spread over four bases. The physiotherapists were based in each town, working different hours to those of the other team members. This often meant they had no access to a RROP car. The Community Health/hospital car was often already in use, which meant they had to utilise their own car to perform home visits.

Staff travelled together to each centre so all could attend case conference meetings. Some options to maximise car utilisation are to share cars to similar destinations, walk to home visits and balance home visits with seeing inpatients and outpatients. Flexibility and the provision of adequate transport are necessary for visiting services. A realistic aim is one car between two people.

Access to office facilities

The lack of workspace at each centre also hindered service provision. Easy access to an STD telephone and client files are also useful. It is highly recommended that the health sector provide a permanent base at each centre.

Staff isolation

The Queensland Rural Health Policy acknowledges the need to address rural staff retention and professional development needs²¹. Staff changes and isolation may impair service delivery. After the implementation of regular meetings, a staff newsletter and active teambuilding efforts, the isolation of staff decreased within the team. Local service providers also felt RROP reduced their isolation. It is recommended in other visiting services, especially where staff are geographically scattered, that a strong emphasis on team dynamics is introduced from the beginning.

Equipment

Versatility is required of visiting service providers when carting equipment and education tools. It is impossible to carry around a whole nutrition department, so creative and flexible solutions are often required.

Safety

When travelling over long distances on isolated roads, reliable communication devices are a workplace health and safety requirement.

Temporary projects

The very nature of the project being "temporary" did not assist community acceptance of the project. Greater commitment is required of funding, preferably over a year.

Conclusions

The barriers to introducing nutrition services may be similar to those met by other health workers. Experience from the Rural Rehabilitation Options Project has highlighted the importance of the following.

1. Visiting health workers must become acquainted with local systems and develop networks with community organisations.
2. A flexible approach to service delivery is necessary. Access to services should be improved when the delivery is targeted to each individual community's needs.
3. Early and continuing consultation with the community and other service providers will assist in the development of a team approach. As well as discussing the community's needs it will provide the opportunity to learn about each other's roles.
4. It is recommended that visiting health workers become aware of potential barriers in providing a visiting service to ensure that they are well prepared and resourced.

The recommendations made in this paper could be useful across disciplines to assist the provision of a co-ordinated and efficient rural health service.

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